

Topic No: 02

Topic Name: **Fraction (Part 1)**

Subject: **Mathematics**

Fraction: Fraction composes of two numbers separated by a line called fraction.

Example: $\frac{5}{6}$ (Here 5 is Numerator and 6 is denominator) $\frac{7}{3}, \frac{2}{3}, \frac{8}{4}$

Proper Fraction: Numerator is smaller than its denominator. The value less than 1

Example: $\frac{3}{4}, \frac{4}{8}, \frac{121}{132}, \frac{0}{1}$

Improper Fraction: Numerator equal to or greater than the denominator. The value equal to or greater than 1

Example: $\frac{3}{2}, \frac{17}{17}, \frac{9}{1}, \frac{15}{14}$

Mixed Fraction: The composition of a whole number and a proper fraction. Value is greater than 1.

Example: $3\frac{7}{8}, 5\frac{1}{4}, 11\frac{3}{4}$

Equivalent Fraction: If you multiply or divide the numerator and denominator of a fraction by the same nonzero number, the value of the fraction remains the same and both the fractions are called Equivalent fraction, for example $\frac{2}{3}$ and $\frac{10}{15}$ are equivalent fraction.

Reducing fraction: The lowest term when the numerator and denominator have no common factor (except 1) is called reducing fraction.

Example: $\frac{4}{6} = \frac{2 \times 2}{2 \times 3} = \frac{2}{3}$ (Here it is a reducing factor)

Squares Of Fractions: when positive fraction less than 1 is squared, the result is smaller than the original number.

Example: $(\frac{1}{2})^2 = \frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$ Here, $\frac{1}{4} < \frac{1}{2}$

Comparing Fractions: If two fractions have the same numerator, the one with the smaller denominator is greater $\frac{5}{15} < \frac{5}{6}$. If two fractions have the same denominator, the one with the larger numerator is greater: $\frac{6}{7} > \frac{1}{7}$.

Or, you can also decimal them by calculator and compare them.
